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OBJECTIVES: To compare the ability of four measures of patient retention in HIV expert care to predict clinical outcomes and health care utilization over 24 months. **METHODS:** This retrospective study examined Veterans Health Administration (VHA) beneficiaries with HIV (ICD-9-CM codes 042 or V08) receiving expert care (HIV-1 RNA and CD4 tests within 1 week of each other) at VHA facilities from October 1, 2006 to September 30, 2008. Patients were 18-89 years old with ≥24 months of VHA eligibility. Retention measures included: "appointments annual" (≥2 appointments annually at least 60 days apart), "appointments missed" (missed ≥25% of appointments), "appointments infrequent" (≥6 months without an appointment), and "appointments missed or infrequent" (missed ≥25% of appointments or ≥6 months without an appointment). Outcomes included: virologic suppression (HIV-1 RNA <500), CD4+ >500, development of an HIV-related condition, progression to AIDS, emergency room (ER) use, and hospitalization. Multivariable regression was used to determine associations between retention measures and outcomes. **RESULTS:** Study subjects (n=8,845) had a mean age of 52 years and 97% were male; 51% were black, 34% white, 11% other, and 4% unknown. At baseline, 64% of patients were virologically suppressed and 37% had a CD4+ >500. At 24 months, 82% were virologically suppressed and 46% had a CD4+ >500. During follow-up, 42% developed an HIV-related condition, 13.0% progressed to AIDS, 0.3% died, 48% visited the ER, and 28% were hospitalized. All four retention measures were associated with virologic suppression at 24 months. In addition, "appointments annual" was predictive of CD4+ >500 and "appointments missed" was associated with CD4+ >500, development of an HIV-related condition, progression to AIDS, ER use, and hospitalization. **CONCLUSIONS:** While all four retention measures had clinical value, "appointments missed" was the most accurate predictor of clinical outcomes and health care utilization at 24 months among VHA patients in HIV expert care.

PHS3

CLINICAL AND ECONOMIC BURDEN OF ATRIAL FIBRILLATION IN MEDICARE BENEFICIARIES WITH ACUTE CORONARY SYNDROME

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OBJECTIVES: To evaluate clinical and economic burden among Medicare beneficiaries hospitalized for acute coronary syndrome (ACS) with comorbid atrial fibrillation (AF). **METHODS:** This study used data from the Medicare Current Beneficiary Survey. Patients with an incident hospitalization for ACS between March 1, 2002-December 31, 2006 and without similar events during 6 months prior were included (date of the first event denoted as the index date). Comorbid AF was identified from Medicare claims during 6 months prior to the index date. Annual health care costs were summarized for the calendar year when the incident ACS event occurred. Incidence rates of subsequent cardiovascular (CV) hospitalization events and mortality was estimated and compared between patients with and without AF. Cox proportional hazards regressions were used to estimate the relative risk of AF on mortality and CV-events adjusting for patient socio-demographic and clinical characteristics. Multi-stage sampling design and population weights were accounted for to yield national representative estimates. **RESULTS:** We identified 795 incident ACS patients representing over 2.5 million Medicare beneficiaries (mean age 76 years; 49% male; 13% with AF). Compared with ACS patients who did not have AF, ACS-AF patients had higher total health care costs ($66,586 vs. $48,031; $P<0.001$) and higher mortality after their ACS admission (574 vs. 277 deaths/1,000 person years; $P<0.001$). Among those discharged alive, patients with AF had a higher risk of subsequent CV-events (836 vs. 386 cases; $P<0.001$) if 1,000 patients were followed for 6 months. The adjusted results showed 59% higher risk of CV-events associated with AF (HR=1.590; 95% confidence interval: 1.247-2.026). **CONCLUSIONS:** Using a national representative sample of Medicare beneficiaries, we observed worse clinical and economic outcomes after hospitalization for ACS in patients with comorbid AF. The increased health care burden associated with AF underscores the importance of novel strategies to address management of this population.

PHS4

MULTIDISCIPLINARY PHYSICIAN CARE AND MORTALITY IN HEPATOCELLULAR CARCINOMA

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OBJECTIVES: Multidisciplinary physician care has increased for many cancers yet little evidence exists for hepatocellular carcinoma (HCC). The study objective was to evaluate the association between multidisciplinary care and mortality in HCC. **METHODS:** Non-transplant treated patients with an HCC primary diagnosis in 2000-07 were followed-up in SEER-Medicare data. Multidisciplinary care was operationalized as the number of distinct specialists seen pre-treatment, including surgeons, radiology oncologists, intervention radiologists, hematologists/medical oncologists, gastroenterologists, and generalists. We built survival analysis models controlling for treatment, demographics, and clinical characteristics, and adjusted for selection/survival bias using inverse probability weighting and time-dependent covariates. **RESULTS:** Of 3320 treated HCC patients, 1323 (40%) saw one, 1250 (38%) saw two, and 747 (23%) saw three or more disciplines. Liver directed therapy and radiation was administered to a greater proportion of patients who encountered multiple specialists compared to those who saw a single discipline, who received more resection and chemotherapy. Multidisciplinary care was associated with stage 3 HCC and hepatitis C presence. In contrast, patients from rural areas and those diagnosed with stage 4 HCC saw fewer specialists prior to treatment. In time-dependent, propensity score adjusted survival analysis, patients who saw three or more disciplines had 10% (P=0.05) reduced mortality, compared to those who saw one discipline. When stratified by treatment received, patients on chemotherapy who saw three or more disciplines had 28% (P=0.002) reduced mortality. **CONCLUSIONS:** Multidisciplinary care for non-transplant HCC patients was associated with reduced mortality, particularly among chemotherapy recipients. While adjusting for selection and survival bias, our study may not fully capture the confounding effects of referral patterns among specialists on treatment and survival. Our findings provide evidence that may further support the development of models for coordinated health care delivery such as accountable care organizations (ACOs).

PHS5

IMPACT OF A PHARMACY-BASED DIABETES MANAGEMENT PROGRAM ON GLYCEMIC CONTROL IN AN INPATIENT GENERAL MEDICINE POPULATION

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OBJECTIVES: A pharmacy-based inpatient diabetes management program was evaluated to determine if improved glycemic control could be achieved in a general medicine patient population. **METHODS:** A retrospective chart review of 151 patients with blood glucose (BG) values outside the range 70-180 mg/dL was conducted. Observations for the baseline group (n=84) were derived from July 2010 and for the intervention group (n=67) in October 2010. The odds of poor glycemic control for patients in the intervention versus baseline groups were assessed by multivariate generalized estimating equations. These methods were also used to assess patient characteristics associated with poor glycemic control. **RESULTS:** Across all patients, no evidence was observed indicating the pharmacy program decreased the proportion of days spent out of the targeted blood glucose range [70-180 mg/dL: OR 0.91 (95% CI: 0.83 – 1.02); 70-250 mg/dL: OR 1.03 (95% CI: 0.88 – 1.24)]. However, the subgroup of patients whose admission blood glucose was less than 200 mg/dL (55% of intervention group) experienced a significant reduction in days out of range for both ranges [70-180 mg/dL (OR: 0.72, 95% CI: 0.61– 0.88) and 70-250 mg/dL (OR: 0.5, 95% CI: 0.33 – 0.71)]. No improvement in glycemic control was observed in patients with an admission BG 200 mg/dL or greater. These patients had more disease- and social-related factors associated with poor glycemic control. **CONCLUSIONS:** A subpopulation, patients whose admission glucose was less than 200 mg/dL, experienced improvement in glycemic control in the pharmacy-based program. The remaining patients were generally more complicated from a disease-state and social perspective and experienced no improvement. These patients may require a more intense, multi-disciplinary approach that is better matched to the constellation of factors responsible for their condition.

PHS6

PREDICTORS OF WILLINGNESS TO QUIT SMOKING AMONG A COHORT OF MALE COLLEGE STUDENTS IN THE KINGDOM OF SAUDI ARABIA

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OBJECTIVES: The WHO with its MPOWER (Monitor Protect Offer Warn Enforce Raise) program is assisting the Kingdom of Saudi Arabia (KSA) one of the top 10 cigarette importing countries with a 29% reported smoking prevalence among college Students. This study determined predictors of willingness to quit smoking among a cohort of Saudi male college students. **METHODS:** A cross-sectional study was conducted in a cohort of male (≥18 years) college students that were recruited from three higher education institutions located in two regions within KSA. A pre-tested valid survey was used to collect data including socio-demographics, addiction level, presence of a smoker within the family, social pressure to quit, and number of past attempts to quit. The willingness-to-quit variable was defined by asking participants if they had seriously thought about using smoking cessation strategies. Bivariate and logistic regression analyses were performed to assess factors associated with willingness to quit smoking. **RESULTS:** About 467 surveys were received (response rate 51%). Around 30% (n=104) of participants were smokers of which 72% (n=75) indicated their willingness to quit smoking. The average age of those willingness-to-quit was 22.6 (±2.2) years with an income of <$3200/year. The majority (95%) attempted to quit at least one time in the past. Only, willingness to quit smoking was significantly associated with past quit attempts (P=0.0017; OR=20.6; 95%CI=3.1-137) after controlling for age, marital status, income, addictive level, current or former smoker family member, having a smoker friend, and social